FORMAT FOR "S U D D E N I O N O S P H E R I C D I S T U R B A N C E" REPORTS

COLUMNS	S FMT DESCRIPTION			
1- 2	I2	DATA CODE; always 40.		
3- 5	A3	BLANK		
6- 7	I2	YEAR		
8- 9	I2	MONTH		
10-11	I2	DAY		
12-13	A2	BLANK		
14-17	I4	START TIME; UT hours and minutes event began.		
18	A1	START TIME QUALIFIER; D=after, E=before, U=uncertain.		
19-22	I4	END TIME; UT hours and minutes event ended.		
23	A1	END TIME QUALIFIER; D=after, E=before, U=uncertain.		
24-27	I4	MAX TIME; UT hours and minutes of event maximum.		
28	A1	MAX TIME QUALIFIER; D=after, E=before, U=uncertain.		
29 -30	A2	DROPOUT RATE of Short Wave Fadeout; S=Sudden, SL=Slow, G=Gradual, *=No Data.		
31-32	A2	IMPORTANCE of Short Wave Fadeout; sign in column 32.		
		SWFs are observed on field-strength recordings of distant HF transmitters.		
33-35	I3	PERCENTAGE DECREASE of Sudden Cosmic Noise Absorption.		
36-37	A2	IMPORTANCE of Sudden Cosmic Noise Absorption; sign in column 37. SCNAs measure decreases in galactic radio noise at about 18 to 25 MHz.		
38-39	A2	IMPORTANCE of Sudden Enhancement or Decrease in Atmospherics; sign in column 39. SEAs and SDAs measure rises and falls in LF atmospherics at about 27 kHz.		
40-43	A4	PHASE SHIFT in degrees of Sudden Phase Anomaly at LF or VLF; sign in column 40. SPAs can have either a positive or negative phase change.		
44-46	A3	IMPORTANCE of Sudden Enhancement of Signal Strength; sign in column 46. SESs are obseved on field-strength recordings of extremely stable VLF transmissions.		
47-49	F2.1	DOPPLER FREQUENCY SHIFT in Hz of Sudden Frequency Deviation; sign in column 47. SFDs measure the rapid change in received frequency of HF radio waves reflected from the E and F1 layers.		
50-51	A2	DEFINITENESS; an integer value from 0 to 5; subjective estimate of confidence in identifying event.		
52-55	A4	CALL LETTERS and FREQUENCY (in kHz or MHz) of monitored transmitter. The field consists of either 2 letters and 2 numbers or 3 letters and 1 number.		
56-69	A4	BLANK		
70-74	A5	STATION CODE		
75-80	A6	BLANK		

Importance: from 1-,1,1+ (weakest) to 3-,3,3+ (strongest).

To compress TOYOKAWA's importance scale to a 1- to 3+ range, substitute 1- for 1-2; 1 for 3; 1+ for 4; 2- for 5; 2 for 6; 2+ for 7; 3- for 8-9; 3 for 10-11; and 3+ for 12+.

Definiteness Ratings of SWFs

If after drawing the diurnal trend line, the separations of the event from the background fading pattern remains questionable, then classify the definiteness as either a 0 or 1.

Use the higher value if the depth of fade exceeds twice the normal variation from the diurnal trend line, during middle daylight hours, and if the width lasts more

If the event stands out clearly after drawing the diurnal trend line, classify the definiteness as either a 2 or 3.

If the event is obvious and well defined before drawing the diurnal trend line, classify the definiteness as either a 4 or 5.

Event Qualifications

Use the higher value if the depth of fade exceeds twice the normal variation from the diurnal trend line, during middle daylight hours, and if the width lasts more than 30 min. During early or late daylight hours, use the higher value if the depth of fade exceeds three times the normal variation from the diurnal trend line, and if the width lasts more than 30 min.

If propagation mode changes, magnetic storms, off tags, wide fading pattern, or equipment failure influenced the fade, reduce the rating two units.

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HIRAISO measures the definiteness of SWFs on a scale of 1 to 15. To convert the range to 0-5, substitute 1 for 1-3; 2 for 4-6; 3 for 7-9; 4 for 10-12; and 5 for 13-15.

TOYOKAWA measures the definiteness of SEAs on a scale of 1 to 10. To convert the range to 0-5, substitute 0 for 1-2; 1 for 3-4; 2 for 5; 3 for 6; 4 for 7-8; and 5 for 9-10.

TRANSMITTERS MONITORED BY STATIONS REPORTING SIDS

SID Code		Frequency	Location
OM14			Aldra, Norway
SS21	NSS	21 MHz	Annapolis, Maryland, USA
BA	NBA		Balboa, Canal Zone
AA17	NAA	17 MHz	Cutler, Maine, USA
DMF2		1.539MHz	Deutchlandfunk at Mainflingen
VL19	WWVL	19 MHz	Fort Collins, Colorado, USA
VL20	WWVL	20 MHz	Fort Collins, Colorado, USA
OM10	Omega	10.2 kHz	Haiku, Hawaii, USA
WWI8	WWI	8 MHz	Havana, Illinois, USA
WI11	WWI	11 MHz	Havana, Illinois, USA
WI13	WWI	13 MHz	Havana, Illinois, USA
PM23	NPM	23 MHz	Honolulu, Hawaii, USA
LK18	NLK	18 MHz	Jim Creek, Washington, USA
PG18	NPG	18 MHz	Jim Creek, Washington, USA
ND11		11.3 kHz	North Dakota
WC22	NWC	22 MHz	Northwest Cape, Australia
LUX6		6.090MHz	Radio Luxembourg
MC10		9.82 MHz	Radio Mineria de Chile
RE11		11.3 kHz	Reunion
BR16	GBR	16 MHz	Rugby, England
OM12	Omega	12.0 kHz	Trinidad, West Indies
VH10	WWVH	10 MHz	University of Hawaii
WVH5	WWVH	5 MHz	Universtiy of Hawaii